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PCT09

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/673,222

DATE: 07/27/2001  
 TIME: 20:05:25

Input Set : A:\04765-1.txt  
 Output Set: N:\CRF3\07272001\I673222.raw

ENTERED

3 <110> APPLICANT: Vale, Ronald  
 4 Hartman, James  
 6 <120> TITLE OF INVENTION: Assays for the Detection of Microtubule Depolymerization  
 Inhibitors  
 8 <130> FILE REFERENCE: UCSD-04765  
 10 <140> CURRENT APPLICATION NUMBER: 09/673,222  
 11 <141> CURRENT FILING DATE: 2000-10-13  
 13 <150> PRIOR APPLICATION NUMBER: PCT/US99/08086  
 14 <151> PRIOR FILING DATE: 1999-04-13  
 16 <150> PRIOR APPLICATION NUMBER: 60/081,734  
 17 <151> PRIOR FILING DATE: 1998-04-14  
 19 <160> NUMBER OF SEQ ID NOS: 16  
 21 <170> SOFTWARE: PatentIn version 3.0  
 23 <210> SEQ ID NO: 1  
 24 <211> LENGTH: 517  
 25 <212> TYPE: PRT  
 26 <213> ORGANISM: Strongylocentrotus purpuratus  
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 30 <223> OTHER INFORMATION: katanin p60 subunit  
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 39 20 25 30  
 41 Leu Gln Gln Ile Gln Lys Leu Leu Thr Ser Val His Glu Pro Gln Arg  
 42 35 40 45  
 44 Lys His Gln Trp Gln Thr Ile Arg Gln Glu Leu Ser Gln Glu Tyr Glu  
 45 50 55 60  
 47 His Val Lys Asn Ile Thr Lys Thr Leu Asn Gly Phe Lys Ser Glu Pro  
 48 65 70 75 80  
 50 Ala Ala Pro Glu Pro Ala Pro Asn His Gly Arg Ala Ala Pro Phe Ser  
 51 85 90 95  
 53 His His Gln His Ala Ala Lys Pro Ala Ala Ala Glu Pro Ala Arg Asp  
 54 100 105 110  
 56 Pro Asp Val Trp Pro Pro Pro Thr Pro Val Asp His Arg Pro Ser Pro  
 57 115 120 125  
 59 Pro Tyr Gln Arg Ala Ala Arg Lys Asp Pro Pro Arg Arg Ser Glu Pro  
 60 130 135 140  
 62 Ser Lys Pro Ala Asn Arg Ala Pro Gly Asn Asp Arg Gly Gly Arg Gly  
 63 145 150 155 160  
 65 Pro Ser Asp Arg Arg Gly Asp Ala Arg Ser Gly Gly Gly Arg Gly  
 66 165 170 175  
 68 Gly Ala Arg Gly Ser Asp Lys Asp Lys Asn Arg Gly Gly Lys Ser Asp  
 69 180 185 190  
 71 Lys Asp Lys Lys Ala Pro Ser Gly Glu Glu Gly Asp Glu Lys Lys Phe  
 72 195 200 205  
 74 Asp Pro Ala Gly Tyr Asp Lys Asp Leu Val Glu Asn Leu Glu Arg Asp

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75	210	215	220
77	Ile Val Gln Arg Asn Pro Asn Val His Trp Ala Asp Ile Ala Gly Leu		
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			240
80	Thr Glu Ala Lys Arg Leu Leu Glu Ala Val Val Leu Pro Leu Trp		
81	245	250	255
83	Met Pro Asp Tyr Phe Lys Gly Ile Arg Arg Pro Trp Lys Gly Val Leu		
84	260	265	270
86	Met Val Gly Pro Pro Gly Thr Gly Lys Thr Met Leu Ala Lys Ala Val		
87	275	280	285
89	Ala Thr Glu Cys Gly Thr Thr Phe Phe Asn Val Ser Ser Ala Ser Leu		
90	290	295	300
92	Thr Ser Lys Tyr His Gly Glu Ser Glu Lys Leu Val Arg Leu Leu Phe		
93	305	310	315
			320
95	Glu Met Ala Arg Phe Tyr Ala Pro Ser Thr Ile Phe Ile Asp Glu Ile		
96	325	330	335
98	Asp Ser Ile Cys Ser Lys Arg Gly Thr Gly Ser Glu His Glu Ala Ser		
99	340	345	350
101	Arg Arg Val Lys Ser Glu Leu Leu Ile Gln Met Asp Gly Val Ser Gly		
102	355	360	365
104	Pro Ser Ala Gly Glu Glu Ser Ser Lys Met Val Met Val Leu Ala Ala		
105	370	375	380
107	Thr Asn Phe Pro Trp Asp Ile Asp Glu Ala Leu Arg Arg Arg Leu Glu		
108	385	390	395
			400
110	Lys Arg Ile Tyr Ile Pro Leu Pro Glu Ile Asp Gly Arg Glu Gln Leu		
111	405	410	415
113	Leu Arg Ile Asn Leu Lys Glu Val Pro Leu Ala Asp Asp Ile Asp Leu		
114	420	425	430
116	Lys Ser Ile Ala Glu Lys Met Asp Gly Tyr Ser Gly Ala Asp Ile Thr		
117	435	440	445
119	Asn Val Cys Arg Asp Ala Ser Met Met Ala Met Arg Arg Arg Ile Gln		
120	450	455	460
122	Gly Leu Arg Pro Glu Glu Ile Arg His Ile Pro Lys Glu Glu Leu Asn		
123	465	470	475
			480
125	Gln Pro Ser Thr Pro Ala Asp Phe Leu Leu Ala Leu Gln Lys Val Ser		
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135	<211> LENGTH: 690		
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137	<213> ORGANISM: Strongylocentrotus purpuratus		
139	<220> FEATURE:		
140	<221> NAME/KEY: misc_feature		
141	<223> OTHER INFORMATION: katanin p80 subunit		
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149 Ser Asn Val Asn Cys Leu Ala Leu Gly Pro Met Ser Gly Arg Val Met  
150 20 25 30  
152 Val Thr Gly Gly Glu Asp Lys Lys Val Asn Leu Trp Ala Val Gly Lys  
153 35 40 45  
155 Gln Asn Cys Ile Ile Ser Leu Ser Gly His Thr Ser Pro Val Asp Ser  
156 50 55 60  
158 Val Lys Phe Asn Ser Ser Glu Glu Leu Val Val Ala Gly Ser Gln Ser  
159 65 70 75 80  
161 Gly Thr Met Lys Ile Tyr Asp Leu Glu Pro Ala Lys Ile Val Arg Thr  
162 85 90 95  
164 Leu Thr Gly His Arg Asn Ser Ile Arg Cys Met Asp Phe His Pro Phe  
165 100 105 110  
167 Gly Glu Phe Val Ala Ser Gly Ser Thr Asp Thr Asn Val Lys Leu Trp  
168 115 120 125  
170 Asp Val Arg Arg Lys Gly Cys Ile Tyr Thr Tyr Lys Gly His Ser Asp  
171 130 135 140  
173 Gln Val Asn Met Ile Lys Phe Ser Pro Asp Gly Lys Trp Leu Val Thr  
174 145 150 155 160  
176 Ala Ser Glu Asp Thr Thr Ile Lys Leu Trp Asp Leu Thr Met Gly Lys  
177 165 170 175  
179 Leu Phe Gln Glu Phe Lys Asn His Thr Gly Gly Val Thr Gly Ile Glu  
180 180 185 190  
182 Phe His Pro Asn Glu Phe Leu Leu Ala Ser Gly Ser Ser Asp Arg Thr  
183 195 200 205  
185 Val Gln Phe Trp Asp Leu Glu Thr Phe Gln Leu Val Ser Ser Thr Ser  
186 210 215 220  
188 Pro Gly Ala Ser Ala Val Arg Ser Ile Ser Phe His Pro Asp Gly Ser  
189 225 230 235 240  
191 Tyr Leu Phe Cys Ser Ser Gln Asp Met Leu His Ala Phe Gly Trp Glu  
192 245 250 255  
194 Pro Ile Arg Cys Phe Asp Thr Phe Ser Val Phe Trp Gly Lys Val Ala  
195 260 265 270  
197 Asp Thr Val Ile Ala Ser Thr Gln Leu Ile Gly Ala Ser Phe Asn Ala  
198 275 280 285  
200 Thr Asn Val Ser Val Tyr Val Ala Asp Leu Ser Arg Met Ser Thr Thr  
201 290 295 300  
203 Gly Ile Ala Gln Glu Pro Gln Ser Gln Pro Ser Lys Thr Pro Ser Gly  
204 305 310 315 320  
206 Gly Ala Glu Glu Val Pro Ser Lys Pro Leu Thr Ala Ser Gly Arg Lys  
207 325 330 335  
209 Asn Phe Val Arg Glu Arg Pro His Thr Thr Ser Ser Lys Gln Arg Gln  
210 340 345 350  
212 Pro Asp Val Lys Ser Glu Pro Glu Arg Gln Ser Pro Thr Gln Asp Glu  
213 355 360 365  
215 Gly Val Lys Asp Asp Asp Ala Thr Asp Ile Lys Asp Pro Asp Ser Tyr  
216 370 375 380  
218 Ala Lys Ile Phe Ser Pro Lys Thr Arg Val Asp His Ser Pro Glu Arg  
219 385 390 395 400  
221 Asn Ala Gln Pro Phe Pro Ala Pro Leu Asp Val Pro Gly Ala Gln Glu

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222	405	410	415
224	Pro Glu Pro Phe Lys His Pro Pro Lys Pro Ala Ala Ala Ala Ala Val		
225	420	425	430
227	Ala Pro Val Ser Arg Ala Pro Ala Pro Ser Ala Ser Asp Trp Gln Pro		
228	435	440	445
230	Ala Gln Ala Asn Pro Ala Pro Asn Arg Val Pro Ala Ala Thr Lys Pro		
231	450	455	460
233	Val Pro Ala Gln Glu Val Ala Pro Ser Arg Lys Pro Asp Pro Ile Ser		
234	465	470	475
236	480		
237	Thr Ile Ile Pro Ser Asp Arg Asn Lys Pro Ala Asn Leu Asp Met Asp		
	485	490	495
239	Ala Phe Leu Pro Pro Ala His Ala Gln Gln Ala Pro Arg Val Asn Ala		
240	500	505	510
242	Pro Ala Ser Arg Lys Gln Ser Asp Ser Glu Arg Ile Glu Gly Leu Arg		
243	515	520	525
245	Lys Gly His Asp Ser Met Cys Gln Val Leu Ser Ser Arg His Arg Asn		
246	530	535	540
248	Leu Asp Val Val Arg Ala Ile Trp Thr Ala Gly Asp Ala Lys Thr Ser		
249	545	550	555
251	560		
252	Val Glu Ser Val Val Asn Met Lys Asp Gln Ala Ile Leu Val Asp Ile		
	565	570	575
254	Leu Asn Ile Met Leu Leu Lys Ser Leu Trp Asn Leu Asp Met Cys		
255	580	585	590
257	590		
258	Val Val Val Leu Pro Arg Leu Lys Glu Leu Leu Ser Ser Lys Tyr Glu		
	595	600	605
260	610		
261	Asn Tyr Val His Thr Ser Cys Ala Cys Leu Lys Leu Ile Leu Lys Asn		
	615	620	
263	620		
264	Phe Thr Ser Leu Phe Asn Gln Asn Ile Lys Cys Pro Pro Ser Gly Ile		
	625	630	635
266	640		
267	Asp Ile Thr Arg Glu Glu Arg Tyr Asn Lys Cys Ser Lys Cys Tyr Ser		
	645	650	655
269	655		
270	Tyr Leu Ile Ala Thr Arg Gly Tyr Val Glu Glu Lys Gln His Val Ser		
	660	665	670
272	670		
273	Gly Lys Leu Gly Ser Ser Phe Arg Glu Leu His Leu Leu Asp Gln		
	675	680	685
275	Leu Glu		
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279	<211> LENGTH: 730		
280	<212> TYPE: PRT		
281	<213> ORGANISM: Xenopus laevis		
283	<220> FEATURE:		
284	<221> NAME/KEY: misc_feature		
285	<223> OTHER INFORMATION: Xenopus kinesin central motor 1 (XKCM1)		
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			15
293	Ile Met Arg Ser Asn Gly Val Ile His Asn Ala Asn Ile Thr Ser Val		
294	20	25	30

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296 Asn Met Asp Arg Ser Ser Val Asn Val Glu Trp Lys Glu Gly Glu Ala  
297 35 40 45  
299 Asn Lys Gly Lys Glu Ile Ser Phe Ala Asp Val Ile Ser Val Asn Pro  
300 50 55 60  
302 Glu Leu Leu Asp Ala Val Leu Ala Pro Thr Asn Val Lys Glu Asn Met  
303 65 70 75 80  
305 Pro Pro Gln Arg Asn Val Ser Ser Gln Asn His Lys Arg Lys Thr Ile  
306 85 90 95  
308 Ser Lys Ile Pro Ala Pro Lys Glu Val Ala Ala Lys Asn Ser Leu Leu  
309 100 105 110  
311 Ser Glu Ser Gly Ala Gln Ser Val Leu Arg Glu Arg Ser Thr Arg Met  
312 115 120 125  
314 Thr Ala Ile His Glu Thr Leu Pro Tyr Glu Asn Glu Met Glu Ala Glu  
315 130 135 140  
317 Ser Thr Pro Leu Pro Ile Gln Gln Asn Ser Val Gln Ala Arg Ser Arg  
318 145 150 155 160  
320 Ser Thr Lys Val Ser Ile Ala Glu Glu Pro Arg Leu Gln Thr Arg Ile  
321 165 170 175  
323 Ser Glu Ile Val Glu Glu Ser Leu Pro Ser Gly Arg Asn Asn Gln Gly  
324 180 185 190  
326 Arg Arg Lys Ser Asn Ile Val Lys Glu Met Glu Lys Met Lys Asn Lys  
327 195 200 205  
329 Arg Glu Glu Gln Arg Ala Gln Asn Tyr Glu Arg Arg Met Lys Arg Ala  
330 210 215 220  
332 Gln Asp Tyr Asp Thr Ser Val Pro Asn Trp Glu Phe Gly Lys Met Ile  
333 225 230 235 240  
335 Lys Glu Phe Arg Ala Thr Met Asp Cys His Arg Ile Ser Met Ala Asp  
336 245 250 255  
338 Pro Ala Glu Glu His Arg Ile Cys Val Cys Val Arg Lys Arg Pro Leu  
339 260 265 270  
341 Asn Lys Gln Glu Leu Ser Lys Lys Glu Ile Asp Ile Ile Ser Val Pro  
342 275 280 285  
344 Ser Lys Asn Ile Val Leu Val His Glu Pro Lys Leu Lys Val Asp Leu  
345 290 295 300  
347 Thr Lys Tyr Leu Glu Asn Gln Ala Phe Arg Phe Asp Phe Ser Phe Asp  
348 305 310 315 320  
350 Glu Thr Ala Thr Asn Glu Val Val Tyr Arg Phe Thr Ala Arg Pro Leu  
351 325 330 335  
353 Val Gln Ser Ile Phe Glu Gly Gly Lys Ala Thr Cys Phe Ala Tyr Gly  
354 340 345 350  
356 Gln Thr Gly Ser Gly Lys Thr His Thr Met Gly Gly Asp Phe Ser Gly  
357 355 360 365  
359 Lys Ser Gln Asn Val Ser Lys Gly Val Tyr Ala Phe Ala Ser Arg Asp  
360 370 375 380  
362 Val Phe Leu Leu Leu Asp Gln Pro Arg Tyr Lys His Leu Asp Leu Asp  
363 385 390 395 400  
365 Val Phe Val Thr Phe Phe Glu Ile Tyr Asn Gly Lys Val Phe Asp Leu  
366 405 410 415  
368 Leu Asn Lys Lys Thr Lys Leu Arg Val Leu Glu Asp Ala Lys Gln Glu

**VERIFICATION SUMMARY**

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Input Set : A:\04765-1.txt

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